

ABSTRACT

In figure recognition using a color image, there is provided a figure reading apparatus capable of increasing the processing rate while maintaining the recognition precision.

- 5 The figure reading apparatus includes an image input apparatus (10) for inputting a color image and a data processing apparatus (20) for conducting processing on the input color image. The figure reading apparatus has a main color extraction function (S1) of extracting main colors contained in the color image and resolving the color image into main
- 10 color images respectively of the main colors extracted from the input color image, a projection function (S3) of projecting points of extracted main colors on a three-dimensional space onto a plane by using a conversion expression, a candidate narrowing down function (S4) of removing combinations that need not be combined according to features of distance
- 15 between main colors projected onto a two-dimensional space, and a combination generation function (S5) of combining images from candidates narrowed down and generating an image area candidate.